

CD22 Antibody

Rabbit mAb Catalog # AP90342

Specification

CD22 Antibody - Product Information

Application WB
Primary Accession P20273
Reactivity Rat

Clonality Monoclonal

Other Names

CD22; BLCAM; Leu14; Lyb8; SIGLEC2; B cell receptor CD22 precursor; MGC130020;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 95348 Da

CD22 Antibody - Additional Information

Dilution WB~~1:1000

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

CD22

Description Acts as a regulator of B cell signaling.

CD22 is expressed as both a cytoplasmic and membrane protein during discrete stages of B cell lymphocyte differentiation. The cytoplasmic form of CD22, expressed early in B cell development, is a useful marker for acute lymphocytic leukemia. The membrane form of CD22 is expressed

in mature B cells prior to their differentiation into plasma cells.

Alternative splicing results in two different

isoforms, CD22α and CD22β.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

CD22 Antibody - Protein Information

Name CD22 {ECO:0000303|PubMed:1691828, ECO:0000312|HGNC:HGNC:1643}

Function

Most highly expressed siglec (sialic acid-binding immunoglobulin-like lectin) on B-cells that plays a role in various aspects of B-cell biology including differentiation, antigen presentation, and trafficking to bone marrow (PubMed:<a href="http://www.uniprot.org/citations/34330755" http://www.uniprot.org/citations/34330755"



target="_blank">34330755, PubMed:8627166). Binds to alpha 2,6-linked sialic acid residues of surface molecules such as CD22 itself, CD45 and IgM in a cis configuration. Can also bind to ligands on other cells as an adhesion molecule in a trans configuration (PubMed:20172905). Acts as an inhibitory coreceptor on the surface of B-cells and inhibits B-cell receptor induced signaling, characterized by inhibition of the calcium mobilization and cellular activation. Mechanistically, the immunoreceptor tyrosine-based inhibitory motif domain is phosphorylated by the Src kinase LYN, which in turn leads to the recruitment of the protein tyrosine phosphatase 1/PTPN6, leading to the negative regulation of BCR signaling (PubMed:8627166). If this negative signaling from is of sufficient strength, apoptosis of the B-cell can be induced (PubMed:20516366).

Cellular Location

Cell membrane; Single-pass type I membrane protein

Tissue Location

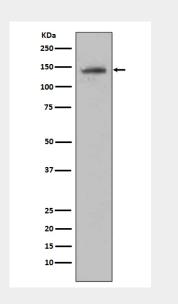
B-lymphocytes.

CD22 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CD22 Antibody - Images



Western blot analysis of Raji cell lysate using CD22 antibody.